

**TESTIMONY OF A.R. WATTS**

**OF**

**THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

**DOCKET NO. 94-006-E**

**IN RE: DUKE POWER COMPANY**

**Q. WOULD YOU PLEASE STATE YOUR NAME, ADDRESS AND  
OCCUPATION?**

A. A.R. Watts, 111 Doctors Circle, Columbia, South Carolina. I am employed by the Public Service Commission of South Carolina, as Chief of the Electric Department.

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

A. I received a B.S. Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by this Commission as a Utilities Engineer in the Electric Department and have been in my present position since August 1981. I have attended professional seminars relating to Electric Utility Rate Design, and have testified before this Commission in conjunction with fuel clause and general rate proceedings.

1 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS  
2 PROCEEDING?

3 A. The purpose of my testimony is to summarize Staff's  
4 findings and recommendations as set forth in the  
5 Electric Department's Report with the exception of  
6 the review of the operations of the McGuire and  
7 Catawba Nuclear Plants which were examined by Staff  
8 witness Erskine.

9 Q. MR. WATTS, WHAT SPECIFIC AREAS WERE ENCOMPASSED BY  
10 STAFF'S EXAMINATION?

11 A. The Electric Department's examination of the  
12 Company's fuel operations consists of a review of  
13 the Company's monthly operating reports, on-site  
14 inspection of the Company's coal quality sampling  
15 techniques, review of the currently approved  
16 adjustment for fuel costs and review of the  
17 Company's short-term projections of kilowatt-hour  
18 sales and fuel requirements.

19 Q. DID STAFF REVIEW THE NUCLEAR OPERATIONS FOR THIS  
20 PERIOD?

21 A. Yes, we looked at the Company's operation of its  
22 nuclear production facilities during the six month  
23 period of this fuel proceeding to determine if the  
24 Company made every reasonable effort to minimize  
25 fuel costs or if any decision of the Company

1       resulted in unreasonable fuel costs. This review  
2       was coupled with a reliability of service criteria.

3       Q. WOULD YOU DISCUSS THE METHODOLOGY USED IN THIS  
4       PROCESS?

5       A. Yes. We looked at each plant outage by review of  
6       Company reports and correspondence between the  
7       Company and the Nuclear Regulatory Commission (NRC)  
8       concerning the outages which required reporting. We  
9       then spent time with Company representatives to  
10      discuss each outage and the sequence of events which  
11      lead to the outage and those which dictated the  
12      duration of the outages. We looked at corrective  
13      actions which were instituted to prevent or reduce  
14      likelihood of repeats of these problems.

15      Q. IN YOUR REVIEW OF THE COMPANY'S PLANT OPERATIONS,  
16      HAVE YOU DETERMINED THAT ANY SITUATIONS WARRANT A  
17      DETERMINATION THAT ANY COMPANY ACTION CAUSED ITS  
18      CUSTOMERS TO BE SUBJECT TO PAYING HIGHER FUEL COSTS?

19      A. No, in the ruling of the Supreme Court of South  
20      Carolina in Hamm vs. Public Service Commission and  
21      Carolina Power & Light Company, it states, "The  
22      rule does not require the utility to show that its  
23      conduct was free from human error; rather, it must  
24      show that it took reasonable steps to safeguard  
25      against error." Staff believes the Company has met

1 this criteria to take reasonable steps to safeguard  
2 against personnel error associated with our  
3 examination of the outages at the Oconee Station  
4 that were reviewed for this proceeding.

5 Specifically the Company's nuclear units  
6 operated at an overall average capacity factor of  
7 82% for the period, ranging from a low of  
8 approximately 72% in May and June to a high of 97%  
9 in April 1994.

10 Q. MR. WATTS, DID STAFF EXAMINE THE OPERATION OF THE  
11 COMPANY'S FUEL TARIFF FOR THE PERIOD UNDER REVIEW?

12 A. Yes, Exhibit No. 10 is a table of Projections of the  
13 Cumulative Recovery Account for various fuel base  
14 levels for the six month period ending May 1995.  
15 Using the currently projected sales and fuel cost  
16 figures through May 1995, and a projected cumulative  
17 under recovery of \$1,551,527 through November 1994,  
18 the average projected fuel expense is approximately  
19 1.0508 ¢/KWH for the six months ending in May 1995.  
20 Applying this fuel factor to the period would create  
21 an estimated \$2,708 under recovery in the cumulative  
22 recovery account. The currently approved base fuel  
23 factor is 1.0000 ¢/KWH. Applying the current fuel  
24 factor, which is also the Company's proposed factor  
25 to the period would create an estimated \$5,104,344

1 under recovery.

2 Q. WOULD YOU BRIEFLY EXPLAIN THE REMAINING ELECTRIC  
3 DEPARTMENT EXHIBITS?

4 A. Staff Exhibit No. 1 is a listing of power plant  
5 capacity factors and equivalent availability  
6 factors, respectively. Exhibit No. 2 shows the  
7 Company's Major Unit Outages for the months of  
8 April 1994 through September 1994, listing the  
9 plants by unit, duration of the outage, reason for  
10 outage, and corrective action taken. Exhibit No. 3  
11 lists the Company's percentage Generation Mix by  
12 fossil, nuclear, and hydro for the period April 1994  
13 through September 1994. Exhibit No. 4 reflects the  
14 Company's major plants by name, type of fuel used,  
15 fuel cost in cents per KWH to operate, and total  
16 megawatt-hours generated for the six months ending  
17 September 30, 1994. Exhibit No. 5 shows a  
18 comparison of the Company's original retail  
19 megawatt-hour estimated sales to the actual sales  
20 for the six month period ending September 1994.  
21 The Company's forecast of sales has been projected  
22 with a high degree of accuracy. Exhibit No. 6 is a  
23 comparison of the original fuel factor projections  
24 to the factors actually experienced for the six  
25 months ending September 1994. Exhibit No. 7 is a

1 graphical representation including historical and  
2 projected data given in Exhibit No. 6 commencing  
3 January 1993. Exhibit No. 8 is the Company's  
4 currently approved retail adjustment for fuel costs  
5 tariff. Exhibit No. 9 is a history of the cumulative  
6 recovery account.

7 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

8 A. Yes, it does.  
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